SEQUENCE LISTING

<110> Kutyavin, Igor V.
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Hoekstra, Merl
Epoch Biosciences, Inc.

<120> Abasic Site Endonuclease Assay

<130> 17682A-007910US

<140> US 10/645,353
<141> 2003-08-20

<150> US 60/405,642
<151> 2002-08-21

<160> 17

<170> PatentIn Ver. 2.1

<210> 1
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:hairpin substrate structure simulating probe-target nucleic acid-enhancer complex

<220>
<221> modified_base
<222> (47)
<223> n = c modified by 3' tail
2-(6-oxy-2-{2-[5-hydroxy-8-(oxy-methoxy-phosphoryloxy)-octylcarbamoyl]-ethyl}-3-oxo-3H-xanthen-9-yl)-benzoate (structure #2)

<400> 1
gccacattgg aagccaatgt ggcgggcaag gaccgaaggt ccttgcn 47

<210> 2
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:flexible polypeptide chain probe-enhancer linker

<400> 2
Gly Ser Ser Ser Ser
1 5

<210> 3
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target
oligonucleotide

<400> 3
aatgtggcgg gcaaggaccg agtc 24

<210> 4
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:11-mer probe
complementary to target oligonucleotide

<220>
<221> modified_base
<222> (1)
<223> n = a modified by 5' conjugated quencher
phosphoric acid 1-(4-{[4-(2-chloro-4-nitro-phenylazo)-
phenyl]-methyl-amino}-butyryl)-5-hydroxymethyl-pyrrolidin-
3-yl ester methyl ester (structure #15)

<220>
<221> modified_base
<222> (11)
<223> n = t modified by 3' tail of fluorescein (FAM) and linker 4,5-
dichloro-2-(4,7-dichloro-6-oxy-2-{3-[4-hydroxy-2-(oxy-methoxy-
phosphoryloxymethyl)-pyrrolidin-1-yl]-3-oxo-propyl}-5-methyl-3-
oxo-3H-xanthen-9-yl)-benzoate (structure #8)

<400> 4
nctcggtcct n 11

<210> 5
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:enhancer
oligonucleotide for 1 base gap between target
oligonucleotide and duplexes of probe and enhancer

<400> 5
cccgccacat t 11

<210> 6
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:enhancer
oligonucleotide for 0 base gap between target
oligonucleotide and duplexes of probe and enhancer

<400> 6
gcccgccaca t 11

<210> 7
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:enhancer oligonucleotide for 2 base gap between target oligonucleotide and duplexes of probe and enhancer

<400> 7
ccgccacatt 10

<210> 8
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:41-mer fully matched DNA target sequence

<400> 8
agtcacagtc ggtgccaatg tggcgggcaa ggaccgagtc g 41

<210> 9
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:enhancer oligonucleotide

<400> 9
gccacattgg caccgactgt ga 22

<210> 10
<211> 14
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:14-mer oligonucleotide probe

<220>
<221> modified_base
<222> (1)
<223> n = a modified by 5' conjugated quencher phosphoric acid 1-(4-{[4-(2-chloro-4-nitro-phenylazo)-phenyl]-methyl-amino}-butyryl)-5-hydroxymethyl-pyrrolidin-3-yl ester methyl ester (structure #15)

<220>
<221> modified_base
<222> (14)
<223> n = t modified by 3' tail of fluorescein (FAM) and linker 4,5-dichloro-2-(4,7-dichloro-6-oxy-2-{3-[4-hydroxy-2-(oxy-methoxy-phosphoryloxymethyl)-pyrrolidin-1-yl]-3-oxo-propyl}-5-methyl-3-oxo-3H-xanthen-9-yl)-benzoate (structure #8)

<400> 10
nctcggtcct tgcn 14

<210> 11
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:10-mer oligonucleotide probe

<220>
<221> modified_base
<222> (1)
<223> n = a modified by 5' conjugated quencher phosphoric acid 1-(4-{[4-(2-chloro-4-nitro-phenylazo)-phenyl]-methyl-amino}-butyryl)-5-hydroxymethyl-pyrrolidin-3-yl ester methyl ester (structure #15)

<220>
<221> modified_base
<222> (10)
<223> n = t modified by 3' tail of fluorescein (FAM) and linker 4,5-dichloro-2-(4,7-dichloro-6-oxy-2-{3-[4-hydroxy-2-(oxy-methoxy-phosphoryloxymethyl)-pyrrolidin-1-yl]-3-oxo-propyl}-5-methyl-3-oxo-3H-xanthen-9-yl)-benzoate (structure #8)

<400> 11
ngtccttgcn 10

<210> 12
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:fragment of target sequence around single nucleotide polymorphism in human genomic DNA

<400> 12
aaagagacac ggacayatca atccatc 27

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:asymmetric PCR amplification forward primer

<400> 13
caaactttgt ccttggtcta 20

<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:asymmetric PCR amplification reverse primer

<400> 14
ttcttttacc actccccctt 20

<210> 15
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:complementary target oligodeoxyribonucleotide (ODN)

<400> 15
caaggaccga gtc 13

<210> 16
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligodeoxyribonucleotide (ODN) probe

<220>
<221> modified_base
<222> (1)
<223> n = a modified by 5' conjugated quencher phosphoric acid 1-(4-{[4-(2-chloro-4-nitro-phenylazo)-phenyl]-methyl-amino}-butyryl)-5-hydroxymethyl-pyrrolidin-3-yl ester methyl ester (structure #15)

<220>
<221> modified_base
<222> (11)
<223> n = t modified by 3' tail of fluorescein (FAM) and linker 4,5-dichloro-2-(4,7-dichloro-6-oxy-2-{3-[4-hydroxy-2-(oxy-methoxy-phosphoryloxymethyl)-pyrrolidin-1-yl]-3-oxo-propyl}-5-methyl-3-oxo-3H-xanthen-9-yl)-benzoate (structure #8)

<400> 16
nctcggtcct n 11

<210> 17
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial
Sequence:oligodeoxyribonucleotide (ODN) probe

<220>
<221> modified_base
<222> (1)
<223> n = a modified by 5' conjugated quencher
phosphoric acid 1-(4-{[4-(2-chloro-4-nitro-phenylazo)-
phenyl]-methyl-amino}-butyryl)-5-hydroxymethyl-pyrrolidin-
3-yl ester methyl ester (structure #15)

<400> 17
nctcggtcct t 11